

Title (en)

PIXEL MAPPING AND PRINTING FOR MICRO LENS ARRAYS TO ACHIEVE DUAL-AXIS ACTIVATION OF IMAGES

Title (de)

PIXELABILDUNG UND -DRUCK FÜR MIKROLINSENANORDNUNGEN ZUR ZWEIACHSIGEN AKTIVIERUNG VON BILDERN

Title (fr)

CARTOGRAPHIE ET IMPRESSION DE PIXELS POUR DES RÉSEAUX DE MICRO-LENTILLES POUR OBTENIR UNE ACTIVATION À DOUBLE AXE D'IMAGES

Publication

**EP 3042238 A4 20170419 (EN)**

Application

**EP 14842836 A 20140227**

Priority

- US 201314017415 A 20130904
- US 201414190592 A 20140226
- US 2014018920 W 20140227

Abstract (en)

[origin: WO2015034551A1] A visual display assembly adapted for use as an anti-counterfeiting device on paper currency, product labels, and other objects. The assembly includes a film of transparent material including a first surface including an array of lenses and a second surface opposite the first surface. The assembly also includes a printed image proximate to the second surface. The printed image includes pixels of frames of one or more images interlaced relative to two orthogonal axes. The lenses of the array are nested in a plurality of parallel rows, and adjacent ones of the lenses in columns of the array are aligned to be in a single one of the rows with no offset of lenses in adjacent columns/rows. The lenses may be round-based lenses or are square-based lenses, and the lenses may be provided at 200 lenses per inch (LPI) or a higher LPI in both directions.

IPC 8 full level

**G02B 27/22** (2006.01); **B42D 25/324** (2014.01); **B42D 25/342** (2014.01); **H04N 13/307** (2018.01)

CPC (source: EP KR MX RU US)

**B42D 25/29** (2014.10 - EP KR US); **B42D 25/30** (2014.10 - RU); **B42D 25/324** (2014.10 - EP KR); **B42D 25/342** (2014.10 - EP KR);  
**B42D 25/351** (2014.10 - EP KR); **G02B 3/0056** (2013.01 - EP KR); **H04N 13/307** (2018.05 - EP KR MX RU US)

Citation (search report)

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Designated contracting state (EPC)

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DOCDB simple family (publication)

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CA 2923132 A1 20150312; CA 2923132 C 20200908; CN 105683815 A 20160615; CN 105683815 B 20190507; CN 108638690 A 20181012;  
CN 108638690 B 20200421; EP 3042238 A1 20160713; EP 3042238 A4 20170419; JP 2016539378 A 20161215; JP 6349401 B2 20180627;  
KR 20160068758 A 20160615; MX 2016002927 A 20160726; MX 359175 B 20180918; PH 12016500422 A1 20160516;  
RU 2016112319 A 20171009; RU 2661743 C2 20180719; ZA 201602171 B 20170628

DOCDB simple family (application)

**US 2014018920 W 20140227**; AU 2014315695 A 20140227; BR 112016004827 A 20140227; CA 2923132 A 20140227;  
CN 201480060437 A 20140227; CN 201810338774 A 20140227; EP 14842836 A 20140227; JP 2016540873 A 20140227;  
KR 20167008654 A 20140227; MX 2016002927 A 20140227; PH 12016500422 A 20160304; RU 2016112319 A 20140227;  
ZA 201602171 A 20160331